

Directorate General
Central Industrial Security Force
(Ministry of Home affairs)

Pt. Deendayal Antyodaya Bhavan,
CGO Complex, Block No.16,
Lodhi Road, New Delhi - 03

MEDICAL BRANCH

No.M-20015(73)/CISF/Med.Dir./QRs/2021- 1024

Dated: 08.06.2021

To,

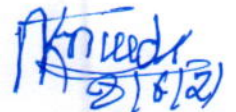
The AIG/Tech,
CISF HQrs., New Delhi

Subject:- **HOSTING OF DRAFT QRs/SPECIFICATIONS AND TRIAL
DIRECTIVES OF MEDICAL EQUIPMENTS ON CISF & MHA
WEBSITES**

Enclosed find herewith a soft copy of Draft QRs/Specification and Trial Directives of '**Hospital Equipments**' prepared by Board of Medical Officers detailed by ADG(Med), CAPFs, vide their letter No.27012/26/ADG(Med)/DA-3/2021/360 dated 22.02.2021 for hosting the same on CISF and MHA websites with a link showing 'DRAFT QRs/SPECIFICATIONS AND TRIAL DIRECTIVES OF MEDICAL ITEMS' for 15 days. Firms/Venders may send their comments/objections/suggestions to DIG/Director (Medical), CISF HQrs., CGO Complex, Lodhi Raod, New Delhi (email ID – dir-med@cisf.gov.in).

2. The action taken report therein may please be intimated to this office please.

Encls:- As above.



(Dr. Ashok Kumar Trivedi)
DIG/Director (Medical)

Copy to:-

1. The Technical Director/NIC, : For kind information and hosting the same
NDCC-II Building, on MHA website for 15 days.
Jaising Road, New Delhi.
2. The ADG/Med., CAPFs : For kind information please.
R.K. Puram, New Delhi.

BOARD PROCEEDING

Proceeding of : A board of officers.
Assembled at : Office of Director(Medical), CISF HQrs., CGO's Complex, Lodhi Road, New Delhi.
On the date of : 09.03.2021 onwards.
By the order of : ADG(Med.), CAPFs order No.27012/26/ADG(Med.)/DA-3/2021/360 dated 22.02.2021 and UO No.(476) dated 04.03.2021.
Purpose : To draw QRs/Specifications and Trial Directives of (i) Body Composition monitor, (ii) ID Now Rapid Molecular diagnostic test instrument, (iii) Digital Stethoscope with integrated ECG, (iv) e-hospital (hospital management implementation system-HMIS) from C-DAC (under IT Ministry, GOI) & (v) Smart Health Kiosk.
Composition of Board :
P.O. Dr. Ashok Kumar Trivedi, DIG/Director(Med.), CISF, CGO Complex, New Delhi
Member-I Dr. Simanchal Hotta, CMO(SG), FHQ BSF Hosp-I, R K Puram, New Delhi.
Member-II Dr. M Venkata Rao, CMO(SG), CH, CRPF, New Delhi.
Member-III Dr. A K Sharma, CMO(SG), Base Hospital, ITBP
Member-IV Dr. Sanjay Chaudhary, Comdt(Med.), 25th Bn. SSB, New Delhi
Member-V Dr. Manjula Jamwal, CMO(SG), CH, CRPF, Delhi (Expert Co-opted member)
Member-VI Dr. Ajit Mukherjee, PSO(LS), BPR&D, Mahipalpur, New Delhi

Pursuant to the orders of ADG/Med., CAPFs, the board assembled at office of DIG/Director (Medical), CISF, CGO Complex, Lodhi Road, New Delhi from 09.03.2021 onwards and proceeded to study and prepare QRs/Specifications and Trial Directives of (i) Body Composition monitor, (ii) ID Now Rapid Molecular diagnostic test instrument, (iii) Digital Stethoscope with integrated ECG, (iv) e-hospital (hospital management implementation system-HMIS) from C-DAC (under IT Ministry, GOI) & (v) Smart Health Kiosk as per Appendix-'A'.

(Dr. Simanchal Hotta)
CMO(SG), BSF
Member-I

(Dr. M Venkata Rao),
CMO(SG), CH, CRPF
Member-II

(Dr. A K Sharma)
CMO(SG), BH, ITBP
Member-III

(Dr. Sanjay Chaudhary)
Comdt.(Med.),
25th Bn. SSB,
Member-IV

(Dr. Manjula Jamwal)
CMO(SG), CRPF
Member-V

(Dr. Ajit Mukherjee)
PSO(LS), BPR&D
Member-VI

(Dr. Ashok Kumar Trivedi)
DIG/Director(Med.) CISF
Presiding Officer

QRS/SPECIFICATIONS AND TRIAL DIRECTIVES (TDS) OF HOSPITAL EQUIPMENTS

1. BODY COMPOSITION MONITOR

APPENDIX-'A'

CRITERIA	SPECIFICATIONS	PROCEDURE SUGGESTED FOR TRIAL FOR BOARD OF OFFICERS	RESULT EXPECTED/ DESIRED
General Specifications	<ol style="list-style-type: none"> Measurement method : SMF (Simultaneous Multi Frequency – Bio Impedance Analysis), DSM (Direct Segmental Measurement – Bio Impedance Analysis) <ol style="list-style-type: none"> Body Weight. BMI (Body Mass Index) Skeletal Muscles Body fat Resting metabolism Body age Visceral Fat Number of Impedance Measurements – 30 Measurement Type : Reactance, Whole body Phase Angle, Segmental Phase Angle (Right Arm, Left Arm, Trunk, Right Leg, Left Leg), Impedance. Measuring Parameter (For Adult/Child) Display – TFT LCD Touchpad Testing height range – 210 centimetres to 250 centimetres. Testing weight range – 250 kilogram to 270 kilogram Testing year range – 6 years to 99 Measurement time – 50 Data Storage (Measurement Record) – 100000 Voltage – 100 – 240V Applied rating current (micro ampere) - 250 Resolution of Display – 800 x 480 pixel Measurement Frequency used - 5kHz, 50kHz, 250kHz Weight of equipment – Approx 12 kilogram. Connectivity interface – USG , Bluetooth, Wi-Fi Operating Temperature - + 10 deg C to +50 deg C. 	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	As per specification.

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2. ID NOW RAPID MOLECULAR DIAGNOSTIC TEST INSTRUMENT

CRITERIA	SPECIFICATIONS		PROCEDURE SUGGESTED FOR TRIAL FOR BOARD OF OFFICERS	RESULT EXPECTED/ DESIRED
General Specifications	Type of model	Compact, easy to use portable system	OEM should submit an undertaking regarding its quality and specifications. Board should check and ensure the same.	As per specification.
	Type of configuration	Bench top		
	Type of system	Close ended		
	Type of automation	Automated		
	Testing Principle	Isothermal amplification process based on Nicking Enzyme Amplification Reaction (NEAR) technique for measuring the fluorescence		
	Detection Type	Qualitative		
	Compatible specimens	Nasal, Nasopharyngeal and Throat swab samples		
	Type of test performed	COVID-19, Influenza A/B, RSV, Strep A2		
	Item read by the instrument to give the result	Test cartridge		
	Number of samples that can be analysed independently at a time	1		
	Able to perform tests without the use of separate DNA / RNA extraction step for processing the patient samples	Yes		
	Internal Process Control provided in each test cartridge which is designed to control the sample inhibition and assay reagent function using cartridge based Nucleic Acid Amplification Technology	Yes		
	Each test should be processed by using internal control target to be provided in the test cartridge (IC) to ensure validated patient sample results are reported by the system	Yes		
	Calibration	Automatic		

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Time to results	Positive results in less than or equal to 6 minutes and Negative results in less than or equal to 15 minutes	OEM should submit an undertaking regarding quality and specifications. Board should check and ensure the same.	As per specification.
Throughput	Minimum 30 tests / 8 hour		
Able to connect with portable external Printer for printing the patient test results	Yes		
Weight of Instrument	3 kilogram		
Dimensions in mm	207*194*131		
Item read by the instrument to give the result	Test cartridge		
Number of samples that can be analyzed independently at a time	1		
Display type	Color Touch Screen LCD Display		
Display size	3.5 inch to 5.5 inch		
Graphical user display	Yes		
Back-lit display	Yes		
Type of user interface or data entry	Barcode Reader, Touch screen		
Data input	User ID, Patient sample ID		
Printable and downloadable test results	Yes		
Barcode Scanner provided	Yes		
Printer provided with necessary accessories to print the results	Yes		
Facility to interface the system for LIS / HIS connectivity	Yes		
Connectivity interface	USB, Ethernet		
Minimum number of test results that can be stored internally	999		
Other features available	Instrument check upon start up, Automatic storage of each test result		
Accessories	NA		
Power Source	230 ± 10 V, AC, 50 Hz, 12 V Power Adapter		
Minimum operating temperature of the instrument	15 degree Celsius		

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	Maximum operating temperature of the instrument	40 degree Celsius	OEM should submit an undertaking regarding its quality and specifications.	As per specification.
	Maximum operating relative humidity of the instrument	85 percent		
	Minimum storage temperature of the instrument	0 degree Celsius	Board should check and ensure the same.	
	Maximum storage temperature of the instrument	50 degree Celsius		
	Compliance to certification (US FDA/CE certification will be accepted only when the Indian standards/certification like BIS/CDSO/AERB are not available)	US-FDA (CFG)		
	Manufacturer facility certifications	ISO:13485 (Latest)		
	Type of Test report available of each batch of the product to prove the conformity to the declared specification	In house Test report from the manufacturer		
	Compliance to other safety standards	IEC-61010		
	Submission of all required certifications, licenses, test reports and any other specific certification requirement as imposed by country of origin to the buyer at the time of bidding in case of bidding/ at the time of supply in case of direct order	Yes		
	Supplier to perform installation, demonstration safety and operation checks before handover	Yes		
	Training of users in operation to be provided	Yes		
	Warranty in Years (Option of comprehensive warranty is available through bidding only, which if opted will supersede normal warranty in the catalogue)	3 year		
	OEM/Reseller shall ensure uninterrupted availability of all spares and consumables for atleast 5 years from the date of purchase	Yes		

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	User/Technical/Operating/Maintenance manuals of the instrument to be supplied in English in hard and soft copy	Yes	OEM should submit an undertaking regarding its quality and specifications. Board should check and ensure the same.	As per specification.
	Product catalog, technical write up in by lingual English & Hindi to be provided both in hard and electronic copies	Yes		
	Details of equipment and procedures required for local calibration and routine maintenance to be supplied if any	Yes		
	Complete details of service agents / contact details should be furnished to buyer and consignee at time of supplies	Yes		
	During the warranty period it shall be ensured that all the break down calls are attended within	24 hour		

3. DIGITAL STETHOSCOPE WITH INTEGRATED ECG

CRITERIA	SPECIFICATIONS	PROCEDURE SUGGESTED FOR TRIAL FOR BOARD OF OFFICERS	RESULT EXPECTED/ DESIRED
General Specifications	<ol style="list-style-type: none"> Should able to convert an acoustic sound to electronic signals. Amplified for optimal listening. Electronic Signals can be further processed and digitalised to transmit to a personal computer/ Laptop. Records clearer sounds through patients clothes. KOROTKF sounds are heard better while measuring blood pressure. Accurate results. Less wastage of money and time by eliminating superfluous test. Reliance on technology by eliminating superfluous tests quality, dimensional accuracy, durability and many more qualitative features. FDA approved/ latest ISO standard. The clip stored in the cloud can be transferred anywhere in the world for 2nd opinion. Make – Stainless steel chest piece single sided. Diaphragm single piece tuneable. 	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	As per specification.

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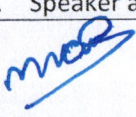
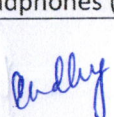
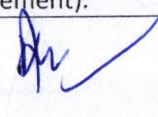
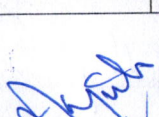
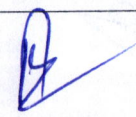
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	<p>13. Model : a) Electronic Stethoscope and Digital ECG, b) Earpiece, Tubing etc.</p> <p>14. Portable easy to use.</p> <p>15. <u>Characteristic</u> : Hear it, Record it, Send it.</p> <p>16. Integrated ECG leads.</p> <p>17. Familiar Stethoscope form factor.</p> <p>18. Mobile App displays PCG & ECG waveforms on any smart device.</p> <p>19. Smart amplification & noise cancellation for crystal clear heart sounds.</p> <p>20. Saves time, costs and enhances the patient experience.</p> <p>21. Instantaneous evidence-based detection at the point-of-care.</p> <p>22. Eliminates wires, gels and conductive pads.</p> <p>23. Simple to learn and easy to use.</p> <p>24. Enables superior auscultation even in noisy environments.</p> <p>25. Allows real-time collaboration with remote specialists & Tele-medicine organizations.</p> <p>26. Available for Android and IOS smart devices.</p> <p>27. Free download from the App Store.</p> <p>28. High fidelity sounds are shown as real-time waveforms on any smart device.</p> <p>29. Bi-directional communications between HD Steth and App.</p> <p>30. Record, save, review, replay, share, generate & save reports</p> <p>31. Records waveforms and patient data which can be easily:</p> <ul style="list-style-type: none"> • Print as an Auscultation Report • Email to a specialist for Tele-medicine consultation. <p>32. All the standards requirements of a stethoscope.</p> <p>33. Back of chest piece contains monitor, display, menu, slot for USB, Bluetooth, Sound control system, Power Button etc.</p> <p>34. Display will be LED and approx 1.5 inch X 1 inch (Preferably).</p> <p>35. Display will be contrast for easy readability with white background & Black display or Black Background & Blue display.</p> <p>36. Battery slot should be properly placed.</p> <p>37. Frequency – 36.52 LUF (Lowest used frequency) in D mode (Diaphragm mode) to -39.02 in B Mode (Bell mode) or as per latest technology & also Extended Range mode as per specification.</p> <p>38. Chest piece and tube can be with 3 years warranty.</p> <p>39. Proper package case.</p> <p>40. All weather friendly.</p> <p>41. Speaker and headphones (as per requirement).</p>	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	<p>As per specification.</p>
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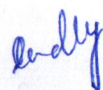

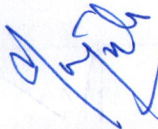









4. E-HOSPITAL (HOSPITAL MANAGEMENT IMPLEMENTATION SYSTEM-HMIS) FROM C-DAC (UNDER IT MINISTRY, GOI)

CRITERIA	SPECIFICATIONS	PROCEDURE SUGGESTED FOR TRIAL FOR BOARD OF OFFICERS	RESULT EXPECTED/ DESIRED
General Specifications	<ol style="list-style-type: none"> 1. Cloud enabled 2. Available in open source technology and is portable across a variety of platforms. 3. Configurable for multiple hospitals 4. Connects people, process and data in real time across all the hospitals 5. Customized clinical data according to department and laboratory 6. Customizable alert management 7. Unique health ID for patients 8. Multi hospital feature to provide cross consultation for patients among different health professionals within the state. 9. Generation of comprehensive EMR and patient profile. 10. Online Registration/appointment. Online lab report view/download. 11. Compliance to HER standards like SNOMED-CT, ICD-10, LOINC etc. 12. Interface with medical equipment's, barcode, biometrics, digital tablets etc. 13. Integration with Aadhar card and SMS gateway 14. Integration with "Meraa Aspataal", online registration system(ORS) 15. Integration with PHRMS system "My Health Records" 16. Supports payment Gateway to enable digital payments. 17. Citizen Centric Mobile application 	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	As per specification.
E. Hospital Features	<ol style="list-style-type: none"> 1. Asset Management 2. Barcode Integration I 3. Case Management 4. CRM 5. Document management 6. Expense management 7. Inventory Management 8. Payroll Management 9. Performance Management 10. Appointment Management 	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	As per specification.

5. SMART HEALTH KIOSK

CRITERIA	SPECIFICATIONS	PROCEDURE SUGGESTED FOR TRIAL FOR BOARD OF OFFICERS	RESULT EXPECTED/ DESIRED
Construction	<ul style="list-style-type: none"> Type of Enclosure – MS. Thickness of Enclosures (mm) – 02mm 	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	As per specification.
Type	<ul style="list-style-type: none"> Type of Health Kiosk – Basic Version : 10 Non-invasive health parameters, Doctor consultation platform with digital health record. Web & mobile app for user & doctor to access data. 		
Display	<ul style="list-style-type: none"> Display Size (inch) – 18.5 inch. Display Type - Colour LCD touch screen Touch Type – Capacitive Display Resolution (Pixel) – Core i3 		
Configuration	<ul style="list-style-type: none"> Processor Make – Intel Processor Configuration – i3 Processor Speed (GHz) – 3.5 Operating System (Preloaded) – Window RAM – 6 gigabytes Internal Storage – 500 gigabytes 		
Health Check up options	<ul style="list-style-type: none"> Automatic Height Measurement System – Yes Automatic Body Impedance Measurement (Weight, BMI, Fat, Muscle, Hydration, Bone Mass) – Yes Contactless IR Thermometer – Yes Upper Arm Automatic Blood Pressure Device – Yes 12 Lead ECG integrated device, with all accessories – Yes Derma scope + Otoscope Device (Separate or Combo) - Yes Digital Stethoscope – Yes Haemoglobin Meter – Yes Lipid Profile Meter (HDL, LDL, Triglyceride, Total Cholesterol) – Yes 		

Rapid Test Option Using Certified Kits (CE/US FDA/UL/BIS)	<ul style="list-style-type: none"> ▪ Dengue (NS-1 Whole Blood) – Yes ▪ Pregnancy Test – Yes ▪ Urine Glucose – Yes ▪ Urine Bilirubin – Yes ▪ Urine Ketone – Yes ▪ Urine Specific Gravity – Yes ▪ Urine Blood – Yes ▪ Urine pH – Yes ▪ Urine Protein – Yes ▪ Urine Urobilinogen – Yes ▪ Urine Nitrite – Yes ▪ Urine Leukocytes – Yes ▪ Typhoid – Yes ▪ Malaria – Yes ▪ HIV I - Yes ▪ HIV II – Yes 	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	<p>As per specification.</p>
Accessories/ Consumables	<ul style="list-style-type: none"> ▪ Blood test Accessories (Pricking Pen, swabs, needles, sterile pouch) – Yes ▪ Otoscope Specula (Set of 3) ▪ Glucometer Strips (100 units pack) – Yes ▪ Hb Cuvettes (100 units pack) – Yes ▪ Lipid Strips (25 Nos. pack), code chip (1 No.), Capillaries (25 Nos.) – Yes ▪ Dengue (NS-1 Whole Blood) (Pack of 30 strips) – Yes ▪ Pregnancy (Pack of 50 Strips) – Yes ▪ Urine (10 Parameters) (Pack of 100 Strips) – Yes ▪ Typhoid (Pack of 50 Strips) – Yes ▪ Malaria (Pack of 30 Strips) – Yes ▪ HIV Kit (Pack of 40 Strips) – Yes 		

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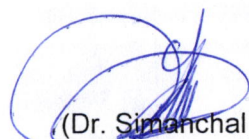
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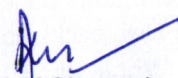
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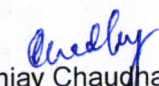
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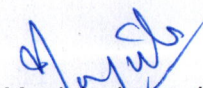
ADD-On Accessories	<ul style="list-style-type: none"> ▪ Wireless Keyboard and Mouse ▪ In built Speakers ▪ Audio In and Out ▪ Fingerprint Reader ▪ Line Interactive UPS with Back up of 30 Minutes ▪ A4 Laser Printer 	<p>OEM should submit an undertaking regarding its quality and specifications.</p> <p>Board should check and ensure the same.</p>	<p>As per specification.</p>
Miscellaneous	<ul style="list-style-type: none"> ▪ Maximum Power Consumption – 60 ▪ Minimum Operating Temperature (Degree C) – 0 ▪ Maximum Operating Temperature (Degree C) – 50 ▪ Operating Humidity (RH) (%) - 80 ▪ Overall Dimensions (L x D x H) (cm x cm x cm) – As per suitability (30.5 x 23.5 x 190.4) ▪ Weight (Maximum) (Kg) – 70 ▪ Installation & commissioning and training to the technical person to operate the Health Kiosk (included in the scope of supply) – Yes 		
Optional Accessories	<ul style="list-style-type: none"> ▪ Spirometer (Wireless BLE connectivity, rechargeable internal Battery) – Yes ▪ Fundus Camera – Yes 		
Warranty	<ul style="list-style-type: none"> ▪ On Site OEM Warranty (Year) - 3 		

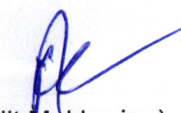

(Dr. Simanchal Hotta)
CMO(SG), BSF
Member-I

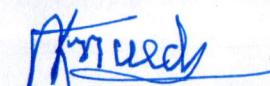

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